

WHAT IS CLAIMED AS NEW AND IS DESIRED TO BE SECURED BY LETTERS

PATENT OD THE UNITED STATES IS:

1. A glass product comprising:

a body having at least one part; and

5 a collar formed on said body,

wherein an axis of said collar is not parallel to an axis of said at least one part.

2. The glass product of Claim 1, wherein said at least one part of said body comprises at least 20% of glass in the glass product.

10 3. The glass product of Claim 1, wherein said at least one part of said body comprises at least 60% of glass in the glass product.

4. The glass product of Claim 1, wherein said axis of said at least one part and said axis of said collar form an angle between 60° and 180°.

5. The glass product of Claim 4, wherein said axis of said at least one part of said body and said axis of said collar form an angle between 90° and 150°.

6. The glass product of Claim 1, wherein said glass product comprises a bottle.

7. The glass product of Claim 1, wherein said glass product comprises a flask.

8. The glass product of Claim 1, wherein said glass product comprises a jar.

9. A process of manufacturing a hollow glass product with an offset collar axis, comprising the steps of:

20 inserting molten glass into a cavity of a roughing mold, said cavity including at least one input section which is substantially vertical;

allowing the molten glass to penetrate into a bottom portion of said cavity;

perforating a collar by moving a punch into said bottom portion of said cavity along a non-vertical axis;

25 extracting said punch from said bottom portion of said cavity, thereby completing a process of shaping the molten glass into a blank with the collar;

transferring the blank into a finishing mold by turning over the blank 180° with respect to a horizontal axis; and

blowing the blank through the collar in said finishing mold such that the blank shapes into the hollow glass product.

10. The process of Claim 9, wherein said input section comprises at least 20% of the total volume of said cavity.

5 11. The process of Claim 9, wherein said input section comprises at least 60% of the total volume of said cavity.

12. The process of Claim 9, further comprising the step of blowing compressed air to force the molten glass toward the bottom of said cavity.

10 13. The process of Claim 9, wherein said punch moves in and out of said bottom portion of said cavity at an angle between 60° and 180° with respect to a vertical axis.

14. The process of Claim 13, wherein said punch moves in and out of said bottom portion of said cavity at an angle between 90 and 150° with respect to the vertical axis.

15. An individual section machine for manufacturing a hollow glass product with an offset collar axis, comprising:

15 a roughing mold having a cavity with at least one upper part, said at least one upper part being substantially vertical;

a finishing mold; and

20 a collar mold including a punch configured to form a collar of said hollow glass product and configured to position said punch alternately in said roughing and finishing molds such that an axis of said punch form an angle between 60° and 180° with respect to a vertical axis.

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